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PROGRAMME

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DP/PROJECTS/7303

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APPROVAL OF UNDP ASSISTANCE TO A PROJECT OF CHINA

IPF:(1992-96) $176 600 000

(CPR/91/120) - Agricultural Inputs and Practice: Sustainable Pest Control and Soil Fertility Programme

Date of approval by the AC:[1/]	10 June 1992
Expected duration:	Five years
Proposed executing agency:	Government
Government implementing agency:	Ministry of Chemical Industries, and Ministry of Agriculture
Proposed UNDP contribution:	$4 688 800 Source of funds: IPF
Government cost sharing:	$ 420 000
Total UNDP budget:	$5 108 800

Project background

China has a total land area of 9.6 million sq. km. out of which only 133 million hectares are arable. About 50 per cent of the arable land is irrigated of which 50 per cent is double cropped. Food crops take up 80 per cent of the area. Some 190 million farm families are dependent on agriculture; and although agricultural output has increased by about 33 per cent over 1978-79 levels, China still imports 5 per cent of total supply to meet food demands despite wide-ranging agroclimatic conditions within the country. The Government emphasizes increasing yield rather than reclamation of virgin/forest land. Two of the main constraints are the current state of pest control and soil fertility. The judicious use of pesticides and fertilizers are an important component of overall approaches to pest control and the building of soil fertility. However, existing pesticide and fertilizer catalyst carrier formulations are not only affecting the capacity utilization of the producing factories but also resulting in lower agricultural production and endangering human health and the environment.

There are only three types of pesticide formulation available to farmers, which are both less effective and more polluting and unsafe than formulations available elsewhere. The non-availability of good catalysts for the production of ammonia/urea is impairing the capacity utilization of the producing plants and increasing cost of production of the final fertilizer products besides endangering the environment due to disposal of poor grade catalysts. Limited balanced use of fertilizers has lead to not only less efficiency but also extensive use and costs, and to the pollution of the ground water with nitrite nitrogen. Bi-lateral arrangements and joint ventures in this sector have placed their interest in capital intensive areas of production. Thus, China still does not have the level of human technical and managerial skills for necessary R & D to improve approaches, products, and applications. To reform existing installations, adopt improved formulations, save energy, reduce consumption of raw materials, and improve balanced use of inputs, the Government requested UNDP assistance under the present approval.

Description of project

The development objective of the programme is to build further the technical and managerial capabilities of those engaged in the production and usage of the two most important agricultural production inputs - fertilizers and pesticides as well as incorporate

[1/] This Fact Sheet reflects the status of the project/revision at the time it was approved by the Action Committee; modifications to the project/revision may have occurred subsequently.

broad approaches to pest control and soil fertility.

The programme components will seek to: (a) increase the efficiencies of pesticide formulation, reduce wastage, reduce occupational health problems at the manufacture as well as user end and also alleviate environmental pollution; (b) enhance the research and development capabilities for suitable catalyst carriers in order to improve their performance needed for increased fertilizer productivity; (c) establish models of balanced fertilization thereby increasing fertilizer use efficiency of the crops and reducing ground water pollution caused by excessive use of nitrogenous fertilizers; and (d) strengthen linkages between the manufacturing industry and the farmers through an effective agricultural extension network.

The basic strategy will provide advisory services, training, upgraded laboratory and pilot test facilities to enhance technical and managerial skills, enable the Nanshen Chemical Research and Development Corp.(NSCC) and the Tianjin Research Institute of Chemical Industries (TRICI) to become centers of excellence, and the Ministry of Agriculture to be able to develop appropriate balanced models for the entire country through work in a target area of seven provinces. Computer modelling of crops, soils, pest control, climate and other factors will be introduced as a rapid tool for testing approaches being developed once basic field data is available. The programme will interact on a regular basis with (RAS/88/031) Pesticide Network Programme for Asia and the Pacific (the project CTA would work in China as well) especially using TCDC and other appropriate modalities. The Management Support Component will enhance interaction and cooperation between the two ministries responsible for use of inputs and for their production leading to products more responsive to farmer needs and environmentally safer. Assistance will also target improved safety and health for production workers and farmers which will impact especially on women who make up a large proportion of the work force.

Inputs

UNDP will provide approximately 84 man-months of international experts excluding the monitoring/management components of the programme; 216 man-months of training and study tours for the Chinese trainees in foreign institutions; and proper equipment to upgrade the laboratories and the pilot plant facilities.

Financial data

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Personnel	1 443 000
Training	1 253 000
Equipment	2 044 800
Miscellaneous	60 000
Component to be determined	308 000
Total	5 108 800

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